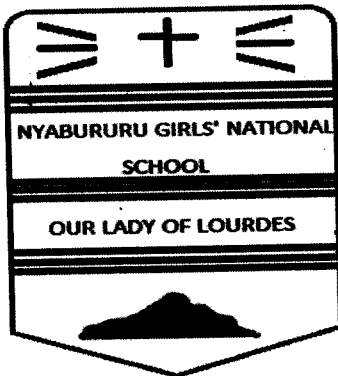


NAME .....CLASS ..... C/NO .....

Signature .....



**FORM 4 COMPUTER STUDIES P.1**  
**MARCH SERIES 2014**  
**TIME: 2 HOURS**

<i>Date done</i>	
<i>Invigilator</i>	
<i>Date returned</i>	
<i>Date revised</i>	

**Instructions**

Answer all questions in both sections.

**SECTION A (54 MARKS)**

1. (a) What is a disk formatting? (2mks)

(b) Draw a block diagram to explain how raw facts are transformed into meaningful output. (4mks)

2. (a) Explain why the following controls should be implemented for computer based system. (2mks)
- (i) Back-ups
  - (ii) Passwords
- (b) For each of the following give a reason why they should not be allowed in the laboratory.
- (i) Smoking (1mk)
  - (ii) Eating food (1mk)
3. (i) What is a computer keyboard? (1mk)
- (ii) List 3 types of keys found on keyboard giving an example in each. (3mks)
4. State any peripheral devices that get their power directly through ports. (2mks)
5. A firm intends to buy a new software. List 3 items that should accompany the software. (3mks)

6. (a) Give 4 types of computer viruses. (4mks)

(b) State 3 ways through which computer viruses may be controlled. (3mks)

7. Distinguish between system software and application software. (2mks)

8. State what is meant by each of the following citing an example where it is used.

(a) Magnetic Ink Character Recognition. (2mks)

(b) Optical Mark Reader (2mks)

9. State 2 methods of minimizing dust in the computer laboratory. (2mks)

10. State 3 factors that determine the price of a computer. (3mks)

11. Give two ways in which proper ventilation can be ensured in a computer laboratory. (4mks)

12. How do Registers differ from Buffers? (2mks)

13. State any 4 factors to be considered when choosing an operating system. (4mks)

14. Give 2 examples of magnetic disks. (2mks)

15. State any 4 differences between impact and non-impact printers. (4mks)

16. (a) Convert:

(i)  $11010.01_2$  to decimals

(2mks)

(ii)  $76.25_{10}$  to binary

(4mks)

(iii)  $4.62_8$  to hexadecimal

(4mks)

(b) Explain 3 data representation codes used in computer.

(3mks)

17. (a) Briefly explain any 4 functions of an operating system.

(8mks)

(b) State the functions of the following units of a computer.

(i) Control unit

(2mks)

(ii) Main memory

(2mks)

(iii) Output units

(2mks)

(iv) Secondary memory

(2mks)

18. The worksheet below shows performance of form 2 students in 3 subjects.

	A	B	C	D	E	F	G	H	I	J
	NAME	ADM.	STR	MAT	PHY	CST	TOTAL	MEAN	POSITION	
1	MUIRU P.	2020	WEST							
2	J. KIHARU	2032	SOUTH							
3	E. OMARI	2033	NORTH							
4	L. ODERO	2035	NORTH							
5	M. MAO	2044	SOUTH							
6	J. HILLARY	2045	WEST							
7	Q. EUSTA	2048	NORTH							
8	A. EPHY	2065	WEST							
9	J. KAO	2070	EAST							

(a) Write a formula to show the number of students from the West stream.

(b) Write a formula to be entered in cell G2 that can be copied to range G3:G9 to calculate the total marks for each student.

(c) Provide a formula that can be used to calculate the average score of each student.

(2mks)

(d) What do the following errors mean as used in spreadsheets?

(i) #REF

(2mks)

(ii) #N/A

(2mks)

(iii) #####

(2mks)